

ABSTRACT OF THE DISCLOSURE

A congestion-responsive VoIP system according to the present invention can minimize an increase in transmission traffic by simplifying the transmission of congestion data and avoid the degradation of speech quality by avoiding congestion proactively, by enabling a repeater in an IP network connecting a plurality of terminals to add congestion data a 1 or a 0 to speech packets to be transmitted to the terminals; the terminals to receive speech packets with congestion data and detect a congestion condition based on the congestion data; and a call set-up part to determine selectively a coding method according to the congestion condition.